

CHAPTER 8 DISTRIBUTION LIST AND OTHER

Chapter 8 presents the distribution list for the DPEIS, list of preparers, list of study participants, literature cited, glossary, abbreviations, index and measurements.

8.1 DISTRIBUTION LIST

The draft PEIS was distributed to Federal, tribes, state, parish, and local agencies, businesses, libraries, museums, universities, environmental organizations, groups and individuals, and scoping participants. The complete distribution list is provided in appendix A2.

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8.4 LITERATURE CITED

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8.5

GLOSSARY

Acceptability – Adequate to satisfy a need, requirement, or standard. One of the Army Corps of Engineers requirements for a project.

Adaptive management – An interdisciplinary approach acknowledging our insufficient information base for decision-making; that uncertainty and change in managed resources are inevitable; and that new uncertainties will emerge. An iterative approach that includes monitoring and involves scientists, engineers and others who provide information and recommendations that are incorporated into management actions; results are then followed with further research, recommendations and management actions, and so on.

Aggradational Process of Plant Growth – Plant root material building elevation, usually in fresh marsh.

Air Quality Determination – The Louisiana Department of Environmental Quality ensures that projects do not adversely affect air quality through this determination as a requirement of the Clean Air Act.

Alternative Plan – A set of one or more management measures within a subprovince functioning together to address one or more objectives.

Amplitude – The maximum absolute value of a periodically varying quantity.

Anoxia – Absence of oxygen.

Anthropogenic – Caused by human activity.

Aquaculture – The science and business of farming marine or freshwater food fish or shellfish, such as oysters, crawfish, shrimp and trout, under controlled conditions.

Astronomical Tides – Daily tides controlled by the moon, as opposed to wind-generated tides.

Barbary Soils – Soils in swamps (with logs and stumps) that are level, very poorly drained, with a thin mucky surface layer and clayey underlying material.

Benefits – Valuation of positive performance measures.

Benthic – Living on or in sea, lake, or stream bottoms.

Biomass – The total mass of living matter (plant and animal) within a given unit of environmental area.

Bottomland Hardwood Forest – Low-lying forested wetlands found along streams and rivers.

Brackish Marsh (BRM) – Intertidal plant community typically found in the area of the estuary where salinity ranges between 4-15 ppt.

Chenier Plain – Western part of coastal Louisiana with little influence from Mississippi and Atchafalaya rivers.

Clean Water Act Section 404 (b) (1) – There are several sections of this Act that pertain to regulating discharges into wetlands. The discharge of dredged or fill material into waters of the United States is subject to permitting specified under Title IV (Permits and Licenses) of this Act and specifically under Section 404 (Discharges of Dredge or Fill Material) of the Act.

Coastal Zone Consistency Determination – The U.S. Environmental Protection Agency reviews plans for activities in the coastal zone to ensure they are consistent with Federally approved State Coastal Management Programs under Section 307(c)(3)(B) of the Coastal Zone Management Act.

Coast-wide Plan – Combination of alternative plans assembled to address an objective of set of objectives across the entire Louisiana Coast.

Collocated Team – A collection of scientists and professionals from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, NOAA Fisheries, Natural Resources Conservation Service, U.S. Geological Survey, U.S. Environmental Protection Agency, Louisiana Department of Natural Resources, and Louisiana Department of Wildlife and Fisheries that are located at the USACE, New Orleans District, office and work together on the LCA Plan.

Compaction of Holocene Deposits – Deltaic mud that packs down under its own weight.

Completeness – The ability of a plan to address all of the objectives. One of the USACE four requirements for a project.

Comprehensive Plan – Same as Coast-wide Plan.

Connectivity – Property of ecosystems that allows for exchange of resources and organisms throughout the broader ecosystem.

Continental Shelf – The edge of the continent under gulf waters; the shallow Gulf of Mexico fringing the coast.

Control Structure – A gate, lock, or weir that controls the flow of water.

Crevasse – A breach or gap in the levee or embankment of a river (natural or manmade), through which floodwaters flow.

Cumulative Impacts – The combined effect of all direct and indirect impacts to a resource over time.

Datum – A point, line, or surface used as a reference, as in surveying, mapping, or geology.

Deciduous Forest – Forest composed mostly of trees that lose their leaves in the winter.

Decomposition – Breakdown or decay of organic materials.

Degradation Phase – The phase of the deltaic cycle when sediments are no longer delivered to a delta, and it experiences erosion, dieback, or breakup of marshes.

Deltaic Cycle – Capture of the Mississippi River by a distributary that offered a shorter route to the Gulf of Mexico. After abandonment of an older delta lobe, which would cut off the primary supply of fresh water and sediment, an area would undergo compaction, subsidence, and erosion. The old delta lobe would begin to retreat as the gulf advanced, forming lakes, bays, and sounds. Concurrently, a new delta lobe would begin its advance gulfward.

Deltaic Deposits – Mud and sand deposited at the mouth of a river.

Deltaic Plain – The land formed and reworked as the Mississippi River switched channels in the eastern part of the Louisiana coastal area.

Demersal – Dwelling at or near the bottom of a body of water (e.g., a *demersal fish*).

Detritus – The remains of plant material that has been destroyed or broken up.

Dewatering – The process of dredged sediments compacting while losing water after being deposited.

Discharge – The volume of fluid passing a point per unit of time, commonly expressed in cubic feet per second, millions of gallons per day, or gallons per minute.

Dissolved Oxygen – Oxygen dissolved in water, available for respiration by aquatic organisms. One of the most important indicators of the condition of a water body.

Direct Impacts – Those effects that result from the initial construction of a measure (e.g., marsh destroyed during the dredging of a canal). Contrast with “Indirect Effects.”

Diurnal – Relating to or occurring in a 24-hour period; daily.

Diversion – A turning aside or alteration of the natural course or flow of water. In coastal restoration this usually consists of such actions as channeling water through a canal, pipe, or conduit to introduce water and water-borne resources into a receiving area.

Dynamic – Characterized by continuous change and activity.

Ecological – Refers to the relationship between living things and their environment.

Economic – Of or relating to the production, development, and management of material wealth, as of a country, household, or business enterprise.

Ecosystem – An organic community of plants and animals viewed within its physical environment (habitat); the ecosystem results from the interaction between soil, climate, vegetation and animal life.

Ecosystem Restoration – activities that seek to return a organic community of plants and animals and their habitat to a previously existing or improved natural condition or function.

Effectiveness – Having an intended or expected effect. One of the USACE four requirements for a project.

Efficiency – The quality of exhibiting a high ratio of output to input. One of the USACE four requirements for a project.

Egress – A path or opening for going out; an exit.

Electrical Conductivity – The ability of a medium to conduct electricity. Salt water has a higher electrical conductivity than fresh water, and this property allows the measurement of salinity through a simple meter.

Embankment – A linear mound of earth or stone existing or built to hold back water or to support a roadway.

Encroachment – Entering gradually into an area not previously occupied, such as a plant species distribution changing in response to environmental factors such as salinity.

Endangered Species – Animals and plants that are threatened with extinction.

Endpoints – see Objectives

Engineering News Record (ENR) – A magazine that provides news needed by anyone in or from the construction industry.

Enhance – To augment or increase/heighten the existing state of an area.

Entrenchment – Being firmly embedded.

Environmental Impact Statement (EIS) – A document that describes the positive and negative environmental effects of a proposed action and the possible alternatives to that action. The EIS is used by the federal government and addresses social issues as well as environmental ones.

Estuary – A semi-enclosed body of water with freshwater input and a connection to the sea where fresh water and salt water mix.

Estuarine – Related to an estuary.

Evaporation – The process by which any substance is converted from a liquid state into, and carried off in, vapor; as, the evaporation of water.

Exotic Species – Animal and plant species not native to the area; usually undesirable (e.g., hyacinth, nutria, tallow tree, giant salvinia).

Faulting – A fracture in the continuity of a rock formation caused by a shifting or dislodging of the earth's crust, in which adjacent surfaces are displaced relative to one another and parallel to the plane of fracture.

Feasibility Report – A description of a proposed action, previously outlined in a general fashion in a Reconnaissance Report, that will satisfy the Federal interest and address the problems and needs identified for an area. It must include an assessment of impacts to the environment (either in an Environmental Assessment, or the more robust Environmental Impact Statement), an analysis of alternative methods of completion, and the selection of a Recommended Plan through the use of a cost-effectiveness analysis.

Federal Principals Group (FPG) – A collaboration among Federal agencies at the Washington level to facilitate the flow of information, to provide guidance and recommendations to the USACE and LDNR throughout the study process, and to facilitate resolution of any interagency issues that may be identified in the conduct of the study.

Final Array – The final grouping of the most effective coast-wide plans from which a final recommendation can be made.

Foreshore Dikes – An embankment of earth and rock built to prevent floods or erosion that is built in the area of a shore that lies between the average high tide mark and the average low tide mark.

Framework Development Team (FDT) – A group of professionals from various Federal and state agencies, academia and the public formed to provide a forum for individual members to discuss LCA Comprehensive Study activities and technical issues and to provide comments to the Senior Management Committee.

Fresh Marsh (FAM) – Intertidal herbaceous plant community typically found in that area of the estuary with salinity ranging from 0-3 ppt.

Furbearer – An animal whose skin is covered with fur, especially fur that is commercially valuable, such as muskrat, nutria, and mink.

Geomorphic – Related to the geological surface configuration.

Geosynclinal Down-warping – The downward bend or subsidence of the earth's crust, which allows of the gradual accumulation of sediment

Geotropically – Downward growth in response to gravity, as in plant roots.

Glycophytes – A plant that cannot live in high salinity environments, most plants.

Goals – Statements on what to accomplish and/or what is needed to address a problem without specific detail.

Gradient – A slope; a series of progressively increasing or decreasing differences in a system or organism.

Habitat – The place where an organism lives; part of physical environment in which a plant or animal lives.

Habitat Loss – The disappearance of places where target groups of organisms live. In coastal restoration, usually refers to the conversion of marsh or swamp to open water.

Hazardous, Toxic, and Radioactive Wastes (HTRW) – Projects features must be examined to ensure that their implementation will not result in excessive exposure to pollutants possibly located in the study area.

Headland – A point of land projecting into the sea or other expanse of water, still connected with the mainland.

Herbaceous – A plant with no persistent woody stem above ground.

Hydrodynamic – The continuous change or movement of water

Hydrology – The pattern of water movement on the earth's surface, in the soil and underlying rocks, and in the atmosphere.

Hypoxia – The condition of low dissolved oxygen concentrations.

Indemnification – Insurance against or compensation for loss or damage.

Indirect Impacts – Those effects that are not as a direct result of project construction, but occur as secondary impacts due to changes in the environment brought about by the construction. Contrast with “Direct Impacts.”

Infrastructure – The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions including schools, post offices, and prisons.

Ingress – An entrance or the act of entering.

Inorganic – Not derived from living organisms; mineral; matter other than plant or animal.

Intertributary Deposits – Sand and mud deposited between the river channels or between bayous.

Intermediate Marsh (INM) – Intertidal herbaceous plant community typically found in that area of the estuary with salinity ranging from 2-5 ppt.

Intertidal – Alternately flooded and exposed by tides.

Invertebrates – Animals without backbones, including shrimp, crabs, oysters, and worms.

Keystone Strategy – A strategy that other strategies rely upon for successful implementation.

Land-water Ratio – The relative proportion of wetlands and uplands to water in an area.

Larvae – The stage in some animal's life cycles between egg and adult (most invertebrates).

Leeward – Sheltered from the wind; away from the wind.

Levee – A linear mound of earth or stone built to prevent a river from overflowing; a long, broad, low ridge built by a stream on its flood plain along one or both banks of its channel in time of flood.

Loamy – Soil composed of a mixture of sand, clay, silt, and organic matter.

Locally Preferred Plan (LPP) – Alternative plan preferred by local sponsor if other than the Recommended Plan.

Maintain – To keep in existing state.

Marine forcing – tidal action or exchange.

Measure – A programmatic restoration feature that can be assembled with other measures to produce alternative plans. See also “Project.”

Methodology – A set of practices, procedures, and rules.

Mineral Substrate – Soil composed predominately of mineral rather than organic materials; less than 20 percent organic material.

Mudflats – Flat, unvegetated wetlands subject to periodic flooding and minor wave action.

Myatt Series – Gray terrace soil, with whitish, pebbly subsoil.

National Ecosystem Restoration (NER) – USACE standard for cost-effectiveness based on ecosystem, not economic, benefits.

Near-shore Currents – Movement of water parallel to the shoreline. Usually generated by waves breaking on the shore at an angle other than perpendicular.

National Environmental Policy Act (NEPA) – Ensures that Federal agencies consider the environmental impacts of their actions and decisions. NEPA requires all Federal agencies to consider the values of environmental preservation for all significant actions and prescribes procedural measures to ensure that those values are fully respected.

Net Gain – The amount of cumulative land gain less land loss, when gain is greater than loss.

Net Loss – The amount of cumulative land gain less land loss, when gain is less than loss.

No Action Alternative – The alternative in the LCA Plan which describes the ecosystem of the coastal area if no restoration efforts/projects were done.

Nursery – A place for larval or juvenile animals to live, eat, and grow.

Objectives – More specific statements than “Goals,” describing how to achieve the desired targets.

Oceanic-dumping – The discharge of wastes or pollutants into offshore waters.

Organic – Composed of or derived from living things.

Oscillations – Fluctuations back and forth, or up and down.

Oxidation of Organic Matter – The decomposition (rotting, breaking down) of plant material through exposure to oxygen.

Oxygen-depleted – Situation of low oxygen concentrations where living organisms are stressed.

Petrochemical – Any compound derived from petroleum or natural gas.

Point-Bar Deposit – The shallow depositional area on the inside bank of a river bend.

Post-larval – Stage in an animal’s lifecycle after metamorphosis from the larval stage, but not yet full grown.

Potable Water – Water that is fit to drink.

ppt – parts per thousand. The salinity of ocean water is approximately 35 ppt.

Primary Consolidation/Secondary Compression – Two processes acting on a substrate that has a load applied to it to cause the sediment to increase in density, and decrease in volume.

Prime Farmland - Land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. One of the categories of concern in the EIS.

Principles – Framing statements that can be used to evaluate alternatives while considering issues that affect them. Used along with targets and assessments of ecosystem needs to provide guidance in formulation of alternative plans.

Productivity – Growth of plants and animals.

Progradation – The phase during the deltaic cycle where land is being actively accreted through deposition of river sediments near the mouth.

Programmatic Environmental Impact Statement (PEIS) – an Environmental Impact Statement that supports a broad authorization for action, contingent on more specific detailing of impacts from specific measures.

Project – A constructible increment of an alternative plan.

Project Implementation Report (PIR) – A project-specific follow-up report that expands on the information contained in a Programmatic Feasibility Report to ensure NEPA compliance, such as conducting public meetings, preparing the appropriate environmental documentation, and preparing the engineering designs as specifications necessary to build the project.

Province – A major division of the coastal zone of Louisiana. (e.g., Deltaic Plain and Chenier Plain).

Pulsing – Letting a diversion flow periodically at a high rate for a short time, rather than continuously.

Quantitative – Able to assign a specific number; susceptible to measurement.

Radiocarbon Age Determination – The use of the ratio of carbon isotopes to determine age.

Rebuild – To some extent build back a structure/landform that had once existed.

Reconnaissance Report – A document prepared as part of a major authorization that examines a problem or need and determines if sufficient methods and Federal interest exists to address the problem/need. If so, then a “Feasibility Report” is prepared, which details the solution and its impacts further.

Reduce – To diminish the rate or speed of a process.

Regional Working Group (RWG) – An inter-agency team formed to support the Washington-level Federal Principal’s Group and to facilitate regional level collaboration and coordination on the LCA study.

Rehabilitate – To focus on historical or pre-existing ecosystems as models or references while emphasizing the reparation of ecosystem processes, productivity and service.

Relative Sea Level Rise – The sum of the sinking of the land (subsidence) and eustatic sea level change; the change in average water level with respect to the surface.

Restore – Return a wetland to a close approximation of its condition or function prior to disturbance by modifying conditions responsible for the loss or change; re-establish the function and structure of that ecosystem.

Sangamonian Interglacial Period – the last interglacial period before the Holocene period (the current geological period).

Saline Marsh (SAW) – Intertidal herbaceous plant community typically found in that area of the estuary with salinity ranging from 12-32 ppt.

Salinity – The concentration of dissolved salts in a body of water, commonly expressed as parts per thousand.

Salt Marshes – See “Saline Marsh.”

Scoping – Soliciting and receiving public input to determine issues, resources, impacts, and alternatives to be addressed in the draft EIS.

Sea-Level – Long-term average position of the sea surface.

Sediment Plume – Caused by sediment rich rainwater runoff entering the ocean. The runoff creates a visible pattern of brown water that is rich in nutrients and suspended sediments that forms a kind of cloud in the water spreading out from the coastline. Commonly forms at river and stream mouths, near sloughs, and along coasts where a large amount of rain runoff flows directly into the ocean.

Sheet Flow – Flow of water, sediment, and nutrients across a flooded wetland surface, as opposed to through channels.

Shoaling – The shallowing of an open-water area through deposition of sediments.

Slikensides – The smooth or partially polished surface of rock caused by one rock mass sliding over another in a fault plane.

Social – Relating to human society and its modes of organization.

Socioeconomic – Involving both social and economic factors.

Spoil Banks – Dredged material removed from canals and piled in a linear mound along the edge of canals.

Stabilize – To fix the level or fluctuation of; to make stable.

State Historic Preservation Office (SHPO) – The part of the Louisiana Department of Culture, Recreation, and Tourism that deals with Indian sites and other archaeological remains.

Stillstand – A period of time when sea level did not change.

Storm Overwash – The process by which sand is transposed landward over the dunes during a storm event by waves.

Storm Surge – An abnormal and sudden rise of the sea along a shore as a result of the winds of a storm.

Stough soils – Yellowish brown coarse-loamy soil.

Strategy – Ecosystem restoration concept from the Coast 2050 Plan.

Stream Gaging Data – Records of water levels in streams and rivers.

Submergence – Going under water.

Subprovince – The divisions of the two Provinces (see “Province”) into smaller groupings: 1) east of the Mississippi River; 2) west of the Mississippi River to Bayou Lafourche; 3) Bayou Lafourche to Freshwater Bayou; 4) Freshwater Bayou to Sabine River.

Subsidence – The gradual downward settling or sinking of the Earth’s surface with little or no horizontal motion.

Sustain – To support and provide with nourishment to keep in existence; maintain.

Tarbert Flow – Stream gage data recorded at Tarbert’s Landing on the Mississippi River.

Target – A desired ecosystem state that meets and objective or set of objectives.

Terrestrial Habitat – The land area or environment where an organism lives; as distinct from water or air habitats.

Third Delta – A proposed project that would divert up to 120,000 cubic feet of water per second from the Mississippi River near Donaldsonville, Louisiana down a conveyance channel to the marshes in southern Barataria and Terrebonne Basins.

Toxicity – The measure of how poisonous something is.

Transpiration – The process by which water passes through living plants into the atmosphere.

Turbidity – The level of suspended sediments in water; opposite of clarity or clearness.

Unique Farmland – Land other than Prime Farmland (see “Prime Farmland”) that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, fruits, and vegetables.

Upconing – The tendency of underground salt water to move closer to the surface in the vicinity of a well by drawing fresh ground water out.

Upland (UPL) – A general term for non-wetland elevated land above low areas along streams or between hills.

Water Resource Units (WRU) Stage-damage data developed as part of the Flood Damage Estimation System (FDES) in 1980 for the Mississippi River and Tributaries (MR&T) project were used to estimate the flood damages that are expected to occur in Subprovinces 1, 2, and 3. The data collected for the FDES were delineated into geographic areas with

homogenous physical and hydraulic characteristics. These geographic areas were numerically coded and designated as Water Resource Units (WRUs). Within each WRU, land-use elements (structures, cropland, roads, bridges, railroads, etc.) were categorized by location, value, and corresponding depth-damage relationship. The structural damage categories included: residential, commercial, industrial, public, and farm buildings.

Water Resources Development Act (WRDA) – A bill passed by Congress that provides authorization and/or appropriation for projects related to the conservation and development of water and related resources.

Weir – A dam placed across a canal or river to raise, divert, regulate or measure the flow of water.

8.6 ABBREVIATIONS AND ACRONYMS

BTNEP – Barataria-Terrebonne National Estuary Program	LOOP – Louisiana Offshore Oil Port
CO – carbon monoxide	LADNR – Louisiana Department of Natural Resources
CWA – Clean Water Act	LDWF – Louisiana Department of Wildlife and Fisheries
CMD – Coastal Management Division	LNHP – Louisiana Natural History Program
CRD – Coastal Restoration Division	LPDES – Louisiana Pollution Discharge Elimination System
CWPPRA – Coastal Wetland Planning, Protection Restoration Act	LSU – Louisiana State University
CE/ICA – Cost Effectiveness and Incremental Cost Analysis	MCS – Management Classification System
CEQ – Council on Environmental Quality	Mg/L – milligrams per liter
CFR – Code of Federal Regulations	Mgal/d – Million gallons per day
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act	mi ² – square miles
CFS – Cubic Foot Per Second	MR – Main Report
DEQ – Department of Environmental Quality	MR&T – Mississippi River and Tributaries
DSS –	MRC – Mississippi River Commission
E&D – Engineering and Design	MRGO – Mississippi River Gulf Outlet
ERDC – Engineering Research and Development Center	MRL – Mississippi River Levee
EIS – Environmental Impact Statement	MVD – Mississippi Valley Division
EFH – Essential Fish Habitat	MVN – Mississippi Valley New Orleans District
EJ – Environmental Justice	NAAQS – National Ambient Air Quality Standards
EO – Executive Order	NASQAN – National Stream Quality Accounting Network
FDT – Framework Development Team	NEPA – National Environmental Policy Act
FEMA – Department of Homeland Defense Federal Emergency Management Agency	NGVD – National Geodetic Vertical Datum
FHWAR – National Survey of Fishing, Hunting and Wildlife Associated Recreation	NMFS – Department of Commerce National Marine Fisheries Service (Now known as NOAA Fisheries)
FWCA – Fish and Wildlife Coordination Act	NOAA – National Oceanic and Atmospheric Administration
FTL – Functional Team Leader	NOAA Fisheries – new name for National Marine Fisheries Service
FWP - Future with Project	NPDES – National Pollutant Discharge Elimination System
FWOP - Future without Project	NWRC – National Wetlands Research Center
GIS/RS – Geographic information system/	NWR – National Wildlife Refuge
GIS – Geographic Information System	NRCS – Department of Agriculture Natural Resources Conservation Service
GMFMC – Gulf of Mexico Fisheries Management Council	NOMSA – New Orleans metropolitan statistical area
GIWW – Gulf Intracoastal Waterway	NO ₂ – nitrogen dioxide
GSMFC – Gulf States Marine Fisheries Council	OCS – Outer Continental Shelf
HILCP - Hydrologic Investigation of the Louisiana Chenier Plain	OPEC – Organization of Petroleum Exporting Countries
HNC – Houma Navigation Canal	ORCS - Old River Control System
HTRW – Hazardous, Toxic, or Radioactive Waste	PB – lead
H&H – Hydrology and Hydraulics	PM-10 – Particulate matter less than ten microns
ISA – Initial Site Assessment	ppt – Parts Per Thousand
IHNC – Inner Harbor Navigation Canal	PBMO – Plan that best meets objectives
IWR – Institute of Water Resources	PED – Preconstruction, Engineering, and Design
LAC - Louisiana Administrative Code	P&G – Principles and Guidelines
LCA – Louisiana Coastal Area	

PEIS – Programmatic Environmental Impact Statement
PDT – Project Delivery Team
PVC – polyvinyl chloride
RA – Overfill Factor
ROD – Record of Decision
RECRA – Resource Conservation Recovery Act
RSLR – Relative Sea Level Rise
RO1 – Restoration Opportunity 1
SAV – Submerged Aquatic Vegetation
SAW – Saline Marsh
S&T – Science and Technology
SCORP – Louisiana Statewide Comprehensive Outdoor Recreation Plan
SHPO – State Historic Preservation Officer
SP1 – Subprovince 1
SP2 – Subprovince 2
SP3 – Subprovince 3
SP4 – Subprovince 4
SO2 – sulfur dioxide
S&A – Supervision and Administration
TMDL – Total Maximum Daily Limit
UDV – Unit Day Value
USACE – United States Army Corps of Engineers
USACE-MVN – United States Army Corps of Engineers – Mississippi Valley New Orleans District
USEPA – United States Environmental Protection Agency
USFWS – U.S. Fish and Wildlife Service
USGS – United States Geological Survey
VOC – Volatile Organic Compounds
VT – Vertical Team
WRDA – Water Resource Development Act
WMA – Wildlife Management Area

8.7 INDEX

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8.8 MEASUREMENTS

MEASUREMENTS			
METRIC SYSTEM ¹			
LENGTH			
<i>Unit</i>	<i>Abbreviation</i>	<i>Number of Meters</i>	<i>Approximate U.S. Equivalent</i>
kilometer	km	1,000	0.62 mile
hectometer	hm	100	328.08 feet
dekameter	dam	10	32.81 feet
meter	m	1	39.37 inches
decimeter	dm	0.1	3.94 inches
centimeter	cm	0.01	0.39 inch
millimeter	mm	0.001	0.039 inch
micrometer	µm	0.000001	0.000039 inch
AREA			
<i>Unit</i>	<i>Abbreviation</i>	<i>Number of Square Meters</i>	<i>Approximate U.S. Equivalent</i>
square kilometer	sq km or km ²	1,000,000	0.3861 square miles
hectare	ha	10,000	2.47 acres
are	a	100	119.60 square yards
square centimeter	sq cm or cm ²	0.0001	0.155 square inch
VOLUME			
<i>Unit</i>	<i>Abbreviation</i>	<i>Number of Cubic Meters</i>	<i>Approximate U.S. Equivalent</i>
cubic meter	m ³	1	1.307 cubic yards
cubic decimeter	dm ³	0.001	61.023 cubic inches
cubic centimeter	cu cm or cm ³ also cc	0.000001	0.061 cubic inch

CAPACITY					
<i>Unit</i>	<i>Abbreviation</i>	<i>Number of Liters</i>	<i>Approximate U.S. Equivalent</i>		
			<i>cubic</i>	<i>dry</i>	<i>liquid</i>
kiloliter	kl	1,000	1.31 cubic yards		
hectoliter	hl	100	3.53 cubic feet	2.84 bushels	
dekaliter	dal	10	0.35 cubic foot	1.14 pecks	2.64 gallons
liter	l	1	61.02 cubic inches	0.908 quart	1.057 quarts
cubic decimeter	dm ³	1	61.02 cubic inches	0.908 quart	1.057 quarts
deciliter	dl	0.10	6.1 cubic inches	0.18 pint	0.21 pint
centiliter	cl	0.01	0.61 cubic inch		0.338 fluid ounce
milliliter	ml	0.001	0.061 cubic inch		0.27 fluid dram
microliter	μl	0.000001	0.000061 cubic inch		0.00027 fluid dram
MASS AND WEIGHT					
<i>Unit</i>	<i>Abbreviation</i>	<i>Number of Grams</i>	<i>Approximate U.S. Equivalent</i>		
metric ton	t	1,000,000	1.102 short tons		
kilogram	kg	1,000	2.2046 pounds		
hectogram	hg	100	3.527 ounces		
dekagram	dag	10	0.353 ounce		
gram	g	1	0.035 ounce		
decigram	dg	0.10	1.543 grains		
centigram	cg	0.01	0.154 grain		
milligram	mg	0.001	0.015 grain		
microgram	μg	0.000001	0.000015 grain		